

## ABSTRACT

The present invention provides for the dynamic allocation of processing tasks using variable performance hardware. In addition, the present invention allows tasks to be assigned to computer resources according to the ability of a computer resource to perform the task. In particular, in accordance with an embodiment of the present invention, a computer resource may reject a task of a type that is incompatible with the computer resource or that cannot be performed by the resource in a timely manner. The task may then be assigned to another computer resource. In accordance with a further embodiment of the present invention, a table containing information concerning the available capabilities of computer resources associated with a system is maintained. This table may be updated dynamically, as computer resource capabilities change. Tasks may then be assigned with reference to the table to ensure that only computer resources capable of performing a task in a timely manner are assigned that task. The present invention allows computer resources having differing, including variable, performance characteristics to be integrated into a computer system and allows these resources to be dynamically added and removed.